

**IN THE SPECIFICATION:**

Please amend the specification as follows:

Please amend the paragraph on page 17, from lines 14 to 19, as follows:

As a first step, the conversion matrix generation routine generates a left permutation matrix  $P_1$  having  $m$  rows and  $m$  columns and a right permutation matrix  $Q_1$  having  $n$  rows and  $\underline{n}$   $[[m]]$  columns for transforming the coefficient matrix  $A$  of the original problem into a bordered block diagonal form (processing 44).